



WORKING TOGETHER FOR EDUCATION

Pasifika SmartCentre Final Report and Evaluation

Prepared by Ofa Nai-Saulala and Susan Warren,
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Centres that participated in the survey:

Akoteu Tokaima'ananga, Fetutaiala Aoga Amata, Kenese Aoga Niue, Kia Orana Punanga Reo, Mataliki Tokelau Akoga Kamata, Matua Mo E Tama Aoga Niue, Puna Ole Atamai Aoga Amata, Akoteu Faka-Kalisitiane Ko Namoa, Akoteu Falemasiva, Akoteu Lotofale'ia, Aoga Fa'ata'ita'i Samoa PIC Mangere, Loimata Ole Alofa, Nukutukulea Farwin Aoga Niue, Poetiare O Rongomai, Te Reo Kuki Airani Preschool, Te Reo Rarotonga Bi-Lingual E C Centre, Akoteu Katokakala, Akoteu Tuingapapai-O-Uesile, Mataniu Feagai Ma Le Ata Aoga Amata, Petesa A'oga Amata, Samoa Moni I Lana Gagana Aoga Amata, Savali Ole Filemu Aoga Amata, Tama Ale Eleele 'Aoga Amata, Fetu - I Sasa'e Aoga Amata East Tamaki, St Anthony's Pacific Islands Childcare Centre.

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COMET's vision is "Educated and Knowledgeable Aucklanders". Our mission is to transform Auckland's social and economic landscape through education. COMET was established by Manukau City Council as a not-for-profit charitable trust in 1999 to address education issues in the city. COMET will transfer into the new Auckland Council in November 2010 as a Council Controlled Organisation (CCO).

COMET's work is supported by:



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EXECUTIVE SUMMARY

This paper reports on an evaluation of the Pasifika SmartCentre project which provided ICT equipment and training to 35 Pasifika early childhood centres in Manukau, as a vehicle for community and family learning.

The evaluation consisted of an update of the ICT audits conducted with centres at the beginning of the programme; a centre survey; and a survey of teachers. Together these tools provide evidence of the changes in ICT access and use in the centres for managers, teachers, children and parents; and of managers' and teachers' perceptions of the programme.

The audit shows that centres have increased their ICT resources and are using them more consistently to support children's learning. Centres also report that parents are engaging with their children as they use the KidSmart computer, and many are also making use of the centre computers for their own learning.

Almost all teachers now have access to a computer in the centre and/or at home. Teachers place high value on both ICT use and parent engagement in children's learning, and they would like more professional development in ICT, especially around multimedia uses such as Moviemaker, WordArt and using images in documents. Nearly 80% of teachers feel that their centre is moving forward with ICT, but just over half feel that their centre still does not have enough ICT resources.

Overall the evaluation provides evidence of positive change in the centres and families as a result of the project. It also identifies areas where further support would be valuable to enable centres and parents to take further advantage of the benefits ICT can provide.



“The centre has started to give us computers to use and ICT workshop.”

BACKGROUND

In 2006-07 COMET conducted a survey of all early childhood centres in Manukau City to identify their ICT resources and capabilities and to develop a plan for the future use of ICT in their centre. The survey showed that the Pasifika community was the least connected compared with other ethnic groups in Manukau. The Pasifika SmartCentre Project arose from this finding.

In response to this survey the Pasifika SmartCentre project was developed using these early childhood education centres as a vehicle for community and family learning. The project uses the existing networks within the centres to engage the community and to promote the use of information and communication technologies both in the centre and at home. The project also meaningfully builds ownership of learning within the early childhood centre's community.

ABOUT THE PASIFIKA SMART-CENTRE PROJECT

OUTPUT 1: Audit and Planning

The Pasifika SmartCentre Project started in 2007. The selection of the centres was based on a list provided by the Ministry of Education of all Pacific centres in Manukau City. The centres were approached by phone followed by a visit to conduct an audit. This resulted in the centres receiving an ICT plan each.

The ICT audits began with ten centres that received an IBM KidSmart computer each in 2006 and ten centres in 2007. The ICT audit in 2007 was also an assessment to see whether the centres were eligible for the IBM KidSmart computer donation. This format applied to other centres in 2008 and 2009. All centres that were audited were eligible to be part of the IBM KidSmart programme.

OUTPUT 2: IBM KidSmart Partnership

In 2006 IBM partnered with COMET to donate an IBM KidSmart computer to Pasifika Early Childhood centres in Manukau City. Ten computers were donated to ten ECE centres and in 2007 the agreement continued with ten computers in 2007 and 2008, and

35 Pasifika early childhood centres were supported to use more ICT in their teaching and learning, and in their interactions with parents. IBM provided child-friendly computers and supported initial training; COMET provided professional development for managers, teachers and parents.



five in 2009. A total of 35 Pasifika early childhood centres received a children's computer and basic computer training from IBM as well as training on the learning software that was provided with the computers. This valuable partnership also involved IBM staff supporting the computer workshops facilitated by COMET as part of the IBM voluntary programme in 2008.

OUTPUT 3: Learning with Teachers and Families

One of the outcomes from the audit was that the teachers wanted professional development in ICT. The computer workshops started in 2007 with a focus on building teachers' ICT skills. Later workshops included the parents of children in the centres. The focus of the parent workshops was to encourage involvement in their children's learning in the centre and at home. They were encouraged to use their ICT equipment as a learning tool, for example, using photos that they have stored in their phones or cameras to create digital stories with their children. The workshop topics covered were:

- computer basics
- downloading photos into the computer
- how to manipulate images in a document
- digital storytelling using MSWord and Windows Moviemaker
- The educational programmes in the IBM KidSmart computer.

There were also many discussions around using the internet at home. Parents were made aware of how important it was to update virus software and that viruses can be transferred to their computer, for example when downloading music from the internet.

Smart-Centre Project Data

The table below shows numbers and figures of workshops held, technical visits made to the centres and dollar value of equipment donations and training support.



Number of Workshops held	June 2007 – June 2010	47
Number of technical and professional support visits	June 2007 – June 2010	130
Number of KidSmart computers donated	2006 – 2009	35
Value of KidSmart computers, laptops and IBM staff time	2006 - 2010	\$248,000
Total project cost	2006 – June 2010	\$202,392.16

The table below is a list of all Pasifika centres in Manukau City that participated in the Smart-Centre Project. It also shows the year they received the IBM KidSmart computer.

2006 Recipients	2008 Recipients
Akaiti Mangarongaro	Akoteu Katokakala
Akoteu Tokaima'ananga	Akoteu Tuingapapai-O-Uesile
Fetutaiala Aoga Amata	Mataniu Feagai Ma Le Ata Aoga Amata
Fiti Lagakali Aoga Niue	Papatoetoe Aoga Amata
Kenese Aoga Niue	Petesa A'oga Amata
Kia Orana Punanga Reo	Raitu Ekalesia Apii Reo Kuki Airani
Mataliki Tokelau Akoga Kamata	Samoa Moni I Lana Gagana Aoga Amata
Matua Mo E Tama Aoga Niue	Savali Ole Filemu Aoga Amata
Puna Ole Atamai Aoga Amata	Sisdac Etena Fou Aoga Amata
Tautua Aoga Amata	Tama Ale Eleele 'Aoga Amata
2007 Recipients	2009 Recipients
Akoteu Faka-Kalisitiane Ko Namoa	Akoteu Nasaleti
Akoteu Falemasiva	Fetu - I Sasa'e Aoga Amata East Tamaki
Akoteu Lotofale'ia	Pukapuka Preschool
Aoga Fa'ata'ita'i Samoa PIC Mangere	St Anthony's Pacific Islands Childcare Centre
Loimata Ole Alofa	Tamariki Takitumu Punanga Reo
Nukutukulea Aoga Niue	
Poetiare O Rongomai	
St Paul's Metotisi Aoga Amata	
Te Reo Kuki Airani Preschool	
Te Reo Rarotonga Bi-Lingual E C Centre	

Centres' participation in the SmartCentre project consisted of ICT audits, teacher and family workshops, and technical support visits. COMET received funding from the Airport Community Trust to support centres under the Area of Benefit. These centres were Kenesese Aoga Niue, Tautua Aoga Amata, Poetiare

O Rongomai, Papatoetoe Aoga Amata, Tama Ale Eleele Aoga Amata, Fetu I Sasa'e Aoga Amata and St Peter Chanel Pre-School.

OUTPUT 4: Post Project Audit

The remainder of this document describes the method, results and conclusions from the post-project audit.

EVALUATION METHOD

There were two parts to the evaluation:

1. An updated ICT audit based on the earlier 2007-08 audit of ICT equipment and the use of ICT in the centres.
2. A survey of the IBM KidSmart programme.
3. Teacher ICT survey.

The ICT audit and teacher survey were posted or delivered to 32 Pasifika centres in Manukau City. They were then followed up by phone which resulted in appointments being booked for the coordinator to visit the centres to either pick up the completed surveys or facilitate the questionnaire and the audit with the teachers. The ICT Plan audit was discussed with the teachers. This was the most preferred method.

Update of ICT audits

In 2007-08 an audit of ICT equipment and the use of ICT was conducted prior to them receiving a KidSmart computer from IBM. Each centre received an ICT plan based on this audit. This audit was updated in 2010 in order to identify changes since the previous audit.

During the evaluation, it was discovered that of the 35 centres, three had closed down between 2008 and 2009. Of the 32 centres that remained, 22 responded to the request for an updated ICT audit. This is a 69% response rate. Four centres chose to complete the audit themselves while the rest were interviewed.

A separate survey of the use of the children's KidSmart computer was also given to the centres, with 22 centres responding. The aim of the questionnaire was to find out:

- How the centre used the computer to support the children's learning.
- Whether it was a supervised activity or stand alone.

69% of the centres that are still open responded to a teacher survey, a centre survey and an updated audit of ICT access and use in the centre.

- Whether parents were aware of the programmes
- Whether parents worked with their child on the computer.
- Whether the computer made any difference to the centre in their learning programme
- Whether the teachers needed more professional development from IBM.

Teacher ICT Survey

In addition to the centre surveys, a separate survey was conducted with the individual teachers. This questionnaire was designed for the teachers to be able to give their own feedback and personal thoughts on ICT to complement the information from their centre as a whole. All the teachers in each centre were encouraged to complete the survey. A total of 110 teachers completed the survey from 22 centres. The number of responses from each centre varied from one to ten teachers per centre.

EVALUATION RESULTS

ICT Audit

The audit of the ICT plan showed that the centres' access to and use of ICT has increased over the project timeframe. It showed that most centres have made moderate to major changes in ICT.

Increase in Resources

The IBM computers have contributed to the increase in ICT resources for the centres and most centres have purchased an extra desktop computer for the teachers to use. Some have created a computer suite or technology area with two or more desktop computers and made them available to the parents and the community. For example, a Tongan centre has a Whanau Room with computers that are connected to the internet where they encourage the parents to use the computers with a sign in and out system. There is also an increase in the use of laptops so that the teachers can work in the learning areas with the children.

Many centres do not have enough space to create a computer suite but when new centres are being built or when a centre is being extended, they include an ICT area or technology room in the building plans.

There are administration software packages available that are specifically designed for early childhood centres. The audit showed that 59% of the centres are using them now. There are many reasons why the other 41% are not using the administration programmes. Some of the reasons are:

- Limitations of decisions made by their management committee.
- The costs of ongoing training after the first initial training when the software was installed.
- The person or teacher that had been trained has moved from the centre.

The centres that are using the software have found that it was much easier using the software than working on a spreadsheet and having to do the calculations manually.

A few centres had still been using dial-up to access the internet and email at the time of the 2006-07 audit. There were discussions during that audit around the importance of the phone line being free at all times in case of emergency and for the parents to be able to contact the centre. All centres now either have broadband or broadband wireless.

The use of the computer to write and create learning and digital stories has increased and the presentation is now more complex. Stories are now more than just plain text and pictures, with more professional and presentable learning stories being created. This is evident in the children's portfolios and the displays around the centres.

The images below show the progression of digital story telling by one of the teachers, from manual cutting and pasting to professional desktop work.

Exploratory-Children develop the knowledge that trying things out exploration and curiosity are important and valued ways of learning. This is another learning activity for Preston where he slides up the slide which will help strengthen his small and large muscle for let him experience on his own pace and give him the confidence to be able to balance his body around the bottom photo tells us that Preston enjoys the outdoor activity and he being fun due to the warm weather today and also playing along his cousin Summer.

23.01.09

NUKUTUKULEA AOGANUIE		
Strands in the Early Childhood Curriculum	Decision points in Learning Stories	Learning Story
IN AND OUT OF TUNNEL		
Moui Mafanatia	Finding something of interest here.	
Mana Whenua Moui Malolo	Being involved.	
Mana Atua Moui Kumukumi	Engaging with Challenge and Persisting when difficulties arise.	
Mana Aoturoa Moui Fetutalaaki	Expressing a point of view.	
Mana Reo Moui Fakamokohu	Taking responsibility.	
Mana Tangata		
Name: Preston Place: Inwood Date: 12. 11. 09 Observer: Grace F		

RELATIONSHIP WITH PEERS

Date: 23/01/09 Teacher: Grace

After morning tea all the 2 to 3 years old arrived as I try to round them up to practices the "Make a circle" song for enhancing good relationship as well as their listening skills and appropriate manners.

What happen?
Shenzen helping me directs children to their places, telling them to hold hands. After Shen decide to join the group in singing and swaying with joy.

10:30am: Shenzen find himself in the family corner playing with the doll, referring that he is changing the baby "his wet". How do you know?
"Because... because he cry".
Okay! That's very nice of you to look after the baby. Make sure you give after his bottle. "No bottle". Oh well look for one then. Shen make his way to Deighton and the others saying "excuse me, where is the bottle".

What learning occurred?
Shenzen playing along side others saying "excuse me", forms good relationship with others. He is able to role play in what he thinks necessary to do at the right time.

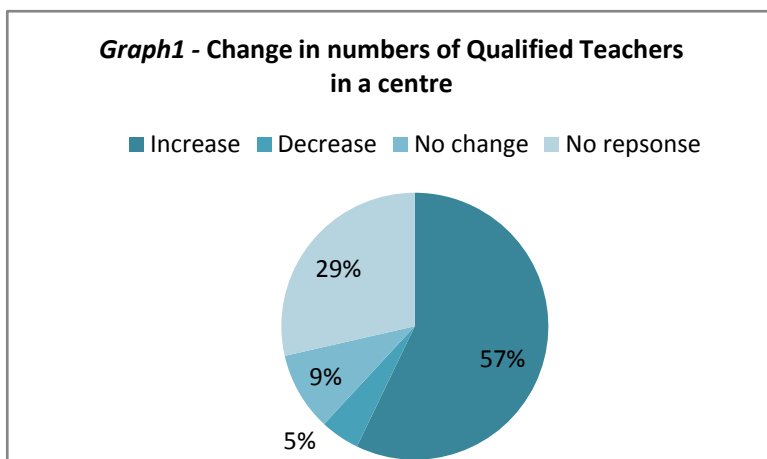
That's very nice of you to respect

L/O: Positive attitudes towards others, (Well-being), develop a sense of resp-ability and respect, (Contribution), develop knowledge to be creative and expressive through pretend play, (Communication), develop strategies for active exploration, thinking and reasoning, (Exploration).

"It is so much easier for me now, I don't have to calculate things manually and it has helped a lot with the IR7 form".

This teacher attended a COMET workshop and was then motivated to enrol herself in a free computer course in South Auckland.

The audit also showed that the use of ICT with the children's learning has increased, mainly because of the IBM KidSmart computer. For many centres in 2006-08, the KidSmart computer was their first computer for the children.



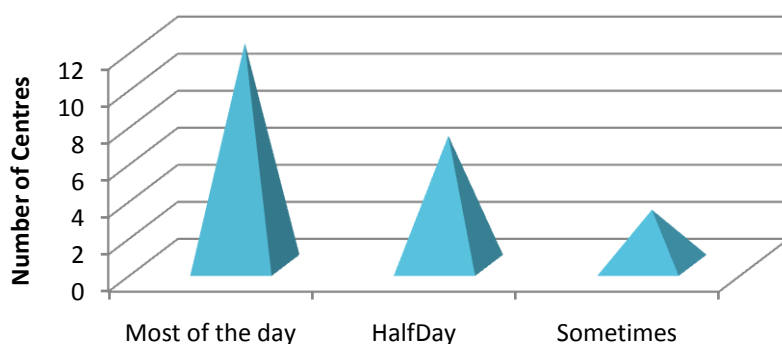
In the first audit the teachers felt that there was no need for a cyber safety policy. But as the use of computers and the internet increases, they are now aware for the need to create cyber safety policy. A few centres are considering this and two centres already have a cyber safety policy in place. This has been discussed with centres as a priority next step.

This audit also showed that there has been an increase of qualified teachers in the centres between 2007 and 2010. All the centres also have staff in training or completing their degree or diplomas. Most of these teachers started in the centres as parent helpers or teacher aides. This shows that the teachers in the centres are also encouraging their parents and the community to study and further their education.

IBM KidSmart Computer

The results of this survey showed that the KidSmart computer is used regularly in the centres. The following graph shows how often the computer is used by the children.

Graph 2 - Number of times the KidSmart Unit is used



In my own visits to centres to deliver professional development and to conduct this evaluation, I have seen the KidSmart unit functioning as a little ICT hub for the children where it is always busy when it is available to the children. Teachers reported multiple learning benefits for children from the unit. There are usually three to five children sitting and standing at the computer and because only one child can drive it, they have had to learn to be more patient. They also gained a better understanding of time management through needing to know when their time is up when it is their turn by identifying their names on the list. Children who have mastered the learning programmes teach the younger ones how to use it.

The teachers reported that the computer has encouraged the parents to engage with their child in the centre. Some parents linger in the centre a bit longer to watch their child on the computer when they usually drop them off and leave straight away. Some children sometimes have settling problems so the parent encourages their child to go on the computer then leave when the child is settled. There are times when the child takes their parent to the computer to show them what they have worked on or learnt during the day.

The learning programmes in the computer consist of maths, reading and science. The children learn about numbers, colours and shapes. In one case, a teacher told the story of when their church president visited the centre. He was in awe watching a little boy who was sitting at the computer like he was composing music. The president asked him what he was doing and the little boy turned around and talked about the shapes and colours that

“We only have one computer for 33 children and one laptop for four teachers.”

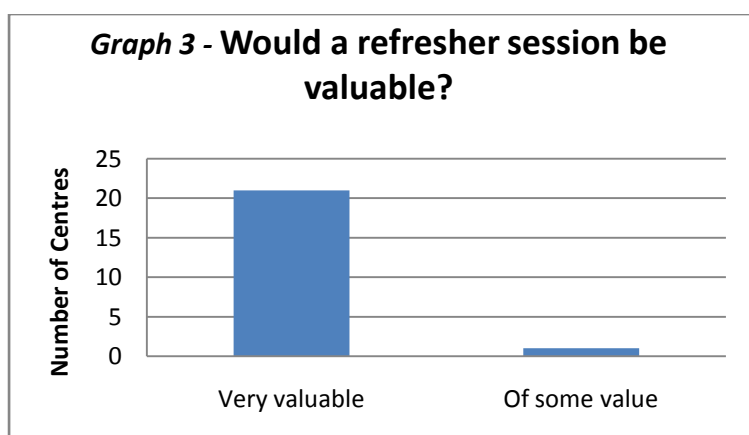
“A mother mentioned to the teacher, “We should have bought a computer for our boy instead of a PlayStation.”

were dancing on the screen. He identified the shapes and colours in his ethnic language.

IBM Computer Workshops

IBM facilitates a computer workshop once a year for the centres that receive a computer within that year. Two teachers per centre attend the workshop. They learn some basic computer skills and learn about the learning programmes for the children. Some of the teachers who attended the workshop have moved on from the centre, taking with them the knowledge of how to work the learning programmes.

This may explain the very high interest in refresher sessions with 21 of the 22 centres stating a refresher would be highly valuable (See graph 3).

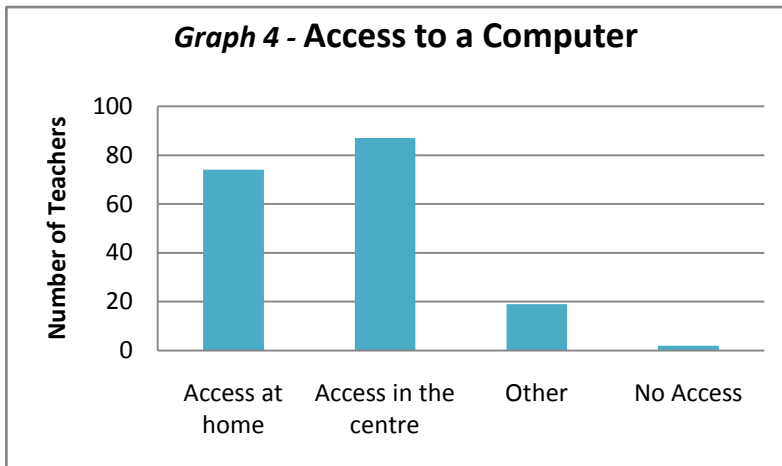


Teacher ICT Survey

Access to a Computer

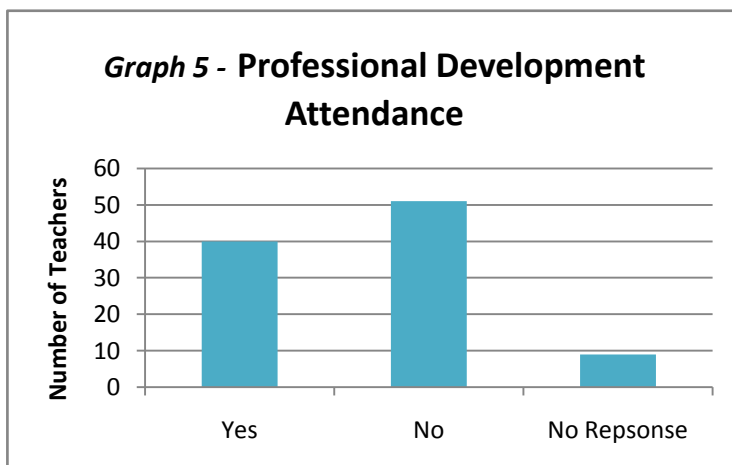
The majority or 99% of the 110 teachers who responded to the survey have access to a computer whether it's at home, in the centre, a public library or at the institute they are currently studying at. The most common place where teachers access a computer was at the centre (79%) or at home (67%).

Although the initial audit did not measure teacher access, the perception of the centres and of COMET is that there has been an increase in teacher access and use of ICT.



The types of usage varied. Some teachers used the computer for email and internet only, though the majority now use it to write the children’s learning stories. This shows that they use the computer in different ways depending on what computer skill they have. For example, some can send emails and use the internet for research but find it difficult using the keyboard to write learning stories. Some teachers stated that it was harder for them to write their learning stories because they are slow to type on the keyboard which gets frustrating, where using the mouse to go on the internet is much easier and faster.

Not many teachers indicated that they attended any ICT professional development and those that did either do this in their own time or attended workshops run by COMET. This question may have been misinterpreted, as most teachers would have attended the COMET sessions.



“Wonderful program should be an ongoing professional development”.

“All staff writes more learning stories with creative skills learnt at COMET workshops.”

Professional Development Needs

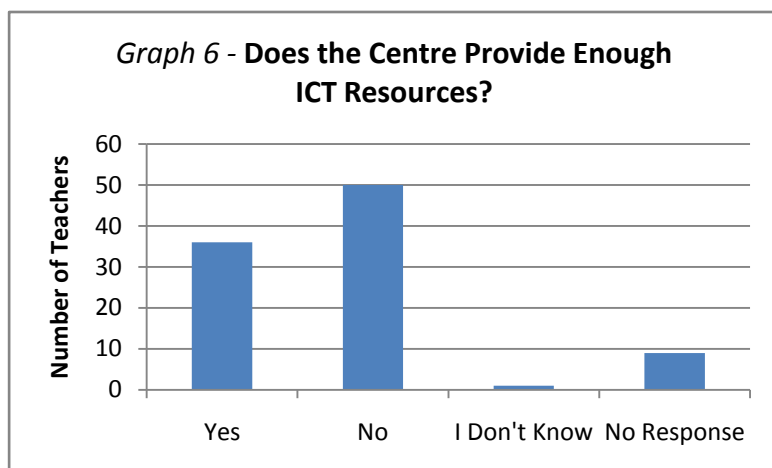
The teachers are still requesting more ICT workshops. They want to review what they've learnt. The main areas in ICT that they would like to learn more about or up skill in are:

- PowerPoint presentation
- Working with images in a document
- Using Autoshapes and WordArt to be able to present professional looking learning stories that parents and the children will enjoy reading.
- Providing learning stories in a CD or presenting it as a movie.
- Learning to use Windows Moviemaker.

Emailing and internet research is becoming a vital tool to use in the centres as communication from major organisations is now through email. The teachers that are managing the centres realise this and want to up skill in this area to be more confident in using email.

Technology in the Centre

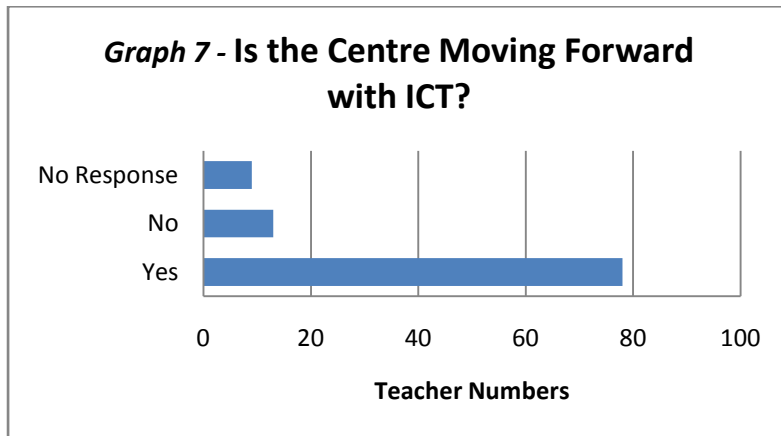
Many feel that their centres are under resourced and need more computers. They agree that ICT is very valuable in the children's learning and for parent engagement with their children, but without enough resources it is difficult to implement this. In the survey, the teachers were asked how they felt about ICT resources in the centre: *Does your centre provide enough ICT resources/equipment to support your work and the children's learning?*



Centres and families are using ICT more regularly, and in more complex ways, to support their work and learning.

“You know, I hate using the computer, I never liked it but now I am manager of the centre I want to learn more, especially using email, I want to learn more about email.”

The graph below shows that almost 80% of teachers feel their centre is moving forward with technology. Even though they may be under resourced, they feel they are moving forward because they know more of what is available to them and use what equipment they have resourcefully.



Barriers to using ICT

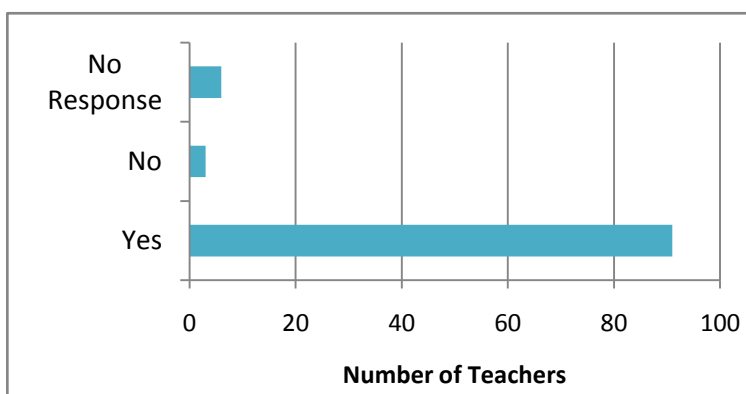
The teachers face many barriers when it comes to using ICT:

- Not having enough access to a computer
- Being too scared to use it
- Not having enough time during work hours to use computer as in some cases it is a restricted area.
- When there is only one computer in the centre.

The more resources in the centre, the easier the access and teachers are able to use the computers.

Many of the teachers are interested in using ICT as an ongoing support for their languages, especially in preparation for when children move to primary where English becomes the medium of instruction for them.

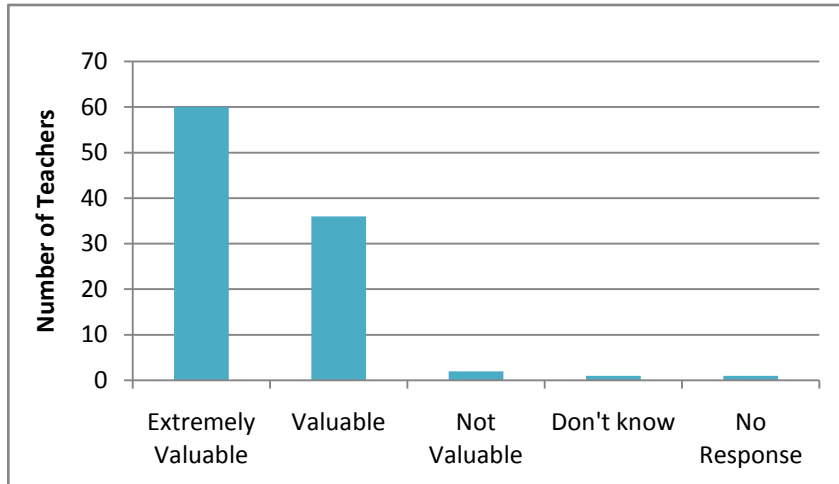
Graph 8 - Teachers who would like to use ICT Story Telling in a Pacific language



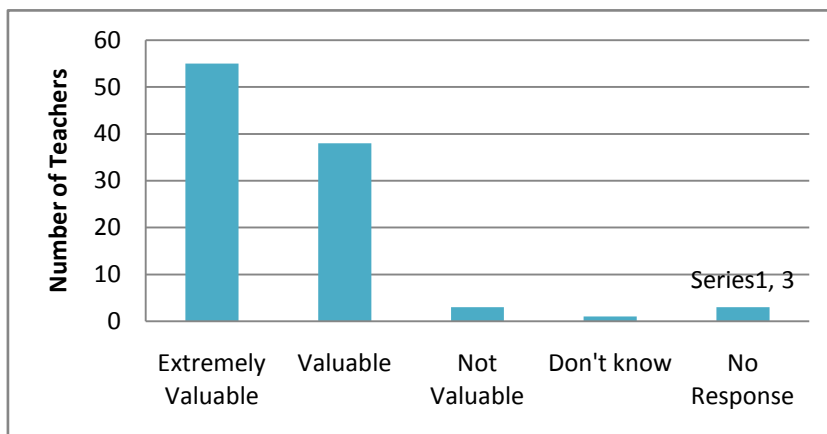
The survey showed that there are still barriers that the teachers and the centres face due to lack of resources.

Graphs nine and ten show that teachers are aware that ICT is a tool that is extremely valuable for the children’s learning and can be used to engage the families in their child’s learning.

Graph 9 - How Valuable is ICT for the Children's Learning



Graph 10 - How Valuable is Parent Engagement with their Children's Learning



Family and Community Outcomes

The surveys did not include the families and communities though in early 2009 a survey for the parents was conducted to assess ICT equipment they have in their homes and what ICT training they would like to receive.

The survey showed that the computer is becoming a popular item of technology equipment in the house. The highest was TV, then DVD player, Radio/Stereo then the computer.

They were asked what they would like to learn the most in ICT, the highest request was learning how to use the computer to support their children's literacy, then email and documentation.

So the family workshops were created to support their requests. Many of the participants had only used the basics on the computer so the workshops covered basic computer use before moving on to images and documents and movie making.

CONCLUSION

It is evident that there has been a significant improvement in access to and use of ICT resources in the Centres as a result of the Pasifika SmartCentre project. Teachers, centre managers, parents and children are all using ICT more regularly, and in more complex ways, to support their work and learning.

Many centres have come a long way from no computer to owning more than one. The computer is no longer perceived as an admin tool. Teachers are more open minded with using ICT in everyday learning, whether it's to write learning stories or to research on the internet for information on topics of the week. The audit of the ICT plan and the teacher survey has shown that the centres are moving forward with ICT.

The donation of the IBM KidSmart computer is a success story in itself. This has given the children the opportunity to have access to their own computer in the centre with their own learning programmes. Some parents are in awe as they watch their child play on the computer.

The Pasifika SmartCentre programme has been successful in supporting the Pasifika Early Childhood centres in Manukau with ICT. The workshops have been successful because they were run in the centres and not in a different venue. These teachers are aware of the free courses that were run elsewhere. The course outline was basic to the advanced eyes but was pitched at a level that suited their teachers.

The survey showed that there are still barriers that the teachers and the centres face due to lack of resources. The audit clearly shows that some centres have managed to budget and find funding to purchase ICT resources. Sometimes there is a misunderstanding between management and the centre staff because the committee members may have no experience in ECE and cannot meet the needs of the centre and the teachers. The teachers cannot move forward if there are no resources to support what they've learnt during workshops.

Most education professionals today are confident with ICT and expect others to be the same. However, most of the teachers in these Pasifika centres are elderly women who grew up before the digital age. They are passionate about education for the children and have taken that passion further, wanting to learn more about ICT to support their teaching and the children's learning. This is a significant challenge for them and for their centres. This report demonstrates that with support, they are making significant progress, with benefits for the teachers themselves, the children they teach and children's parents.

There were also barriers to the facilitation of the SmartCentre programme through COMET. Funding only allowed for a 0.5 coordinator which restricted the amount of support. This sometimes hindered the administration of the programme and the timing of the workshops.

There is still an ongoing need for ICT support in the Pasifika Early Childhood Centres with workshop for the teachers, support in engaging families using ICT, support in using ICT to manage the centre.

RECOMMENDATIONS

Based on this report, we recommend that centres:

- Find ways to provide training for new staff and to extend the skills of current staff.
- Continue to involve parents and community members with their children's learning through ICT, including making ICT resources and support available in ways that fit the particular centre's situation

- budget to provide training and resources for teachers to develop and use their ICT skills
- develop policies for cyber safety and for the use of ICT resources by children, teachers, managers, parents and community

We also recommend the following additional support to ensure the sustainability of the gains made to date:

- A series of training sessions and written resources for one or two staff members at each centre so they can provide ongoing professional development to other staff in their centre, including new staff as they arrive. This includes training in how to effectively engage parents with their children's learning through ICT.